

CLAIMS

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3 1. A golf club head, comprising: a club head
4 body having a face wall with a ball striking surface and a
5 rear surface, a perimeter wall surrounding the face wall and
6 attached to the perimeter of the face wall, and a unit cel-
7 lular structure formed separately from the face wall posi-
8 tioned immediately behind and either engaging or closely
9 spaced from the rear surface of the face wall.

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11 2. A golf club head as defined in Claim 1,
12 wherein the unit cellular structure is generally planar and
13 has a forward surface in engagement with the rear surface of
14 the face wall.

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16 3. A golf club head as defined in Claim 1,
17 wherein the unit cellular structure is generally planar and
18 has a forward surface spaced rearwardly from the rear sur-
19 face of the face wall less than 0.100 inches.

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21 4. A golf club head as defined in Claim 1,
22 wherein the unit cellular structure is open over 60 percent
23 of the area of the unit cellular structure.

1 5. A golf club head as defined in Claim 1,
2 wherein the unit cellular structure includes a plurality of
3 open cells surrounded by other open cells.
4

5 6. A golf club head as defined in Claim 1,
6 wherein the unit cellular structure includes a plurality of
7 ribs intersected by another plurality of ribs with open
8 spaced between the ribs.
9

10 7. A golf club head as defined in Claim 1,
11 wherein the unit cellular structure includes a plurality of
12 ribs with open spaces between the ribs, at least some of the
13 ribs having a "T" shaped cross section defined by a first
14 bar portion and a second bar portion integral with the first
15 bar portion at approximately the center of the first bar
16 portion and perpendicular thereto, said second bar portion
17 facing forwardly toward the rear surface of the face wall.
18

19 8. A golf club head, comprising: a club head
20 body having a face wall with a ball striking surface and a
21 rear surface, a perimeter wall surrounding the face wall and
22 attached to the perimeter of the face wall, and a unit cel-
23 lular structure in the club head body for reinforcing the
24 face wall and minimizing face wall failure under ball impact
25 including a generally planar cellular structure formed
26 separately from the face wall positioned behind and either

1 in engagement or near the rear surface of the face wall,
2 said cellular structure having a forward surface either in
3 engagement with or spaced closely enough from the rear sur-
4 face of the face wall so the rear surface of the face wall
5 will engage and be supported by the cellular structure at
6 club head speeds under 110 mph.

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8 9. A golf club head as defined in Claim 8,
9 wherein the unit cellular structure is generally planar and
10 has a forward surface in engagement with the rear surface of
11 the face wall.

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13 10. A golf club head as defined in Claim 8,
14 wherein the unit cellular structure is generally planar and
15 has a forward surface spaced rearwardly from the rear sur-
16 face of the face wall less than 0.100 inches.

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18 11. A golf club head as defined in Claim 8,
19 wherein the unit cellular structure includes a plurality of
20 ribs intersected by another plurality of ribs with open
21 spaced between the ribs.

22
23 12. A golf club head, comprising: a club head
24 body having a face wall with a ball striking surface and a
25 rear surface, a perimeter wall surrounding the face wall and
26 attached to the perimeter of the face wall, and a unit cel-

lular structure in the club head body for reinforcing the face wall and minimizing face wall failure under ball impact including a generally planar cellular structure formed separately from the face wall positioned behind and either in engagement or near the rear surface of the face wall, said cellular structure having a forward surface either in engagement with or spaced closely enough from the rear surface of the face wall so the rear surface of the face wall will engage and be supported by the cellular structure at club head speeds under 110 mph., said cellular structure also including a plurality of ribs intersected by another plurality of ribs with open spaces between the ribs, and at least some of the ribs having a "T" shaped cross section defined by a first bar portion and a second bar portion integral with the first bar portion at approximately the center of the first bar portion and perpendicular thereto, said second bar portion facing forwardly toward the rear surface of the face wall.